



Benicia Refinery • Valero Refining Company - California

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Certified Mail # 7015 1520 0001 6223 3725

June 2, 2017

Breakdown Exemption Request
for Excess Emissions as a Result of
May 5, 2017 P&GE Power Outage
Breakdown Report ID# 07D17

Mr. Jack Broadbent
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

Attn: Wayne Kino

Dear Mr. Broadbent:

The purpose of this letter is to request a breakdown exemption, per BAAQMD Rules and Regulations 1-432, for emissions excesses of the BAAQMD Permitted Sources at the Valero Benicia Refinery that were caused by the PG&E power outage that occurred on May 5, 2017.

The direct cause of these emissions excesses is the sudden, immediate, and total loss of PG&E 230 kV power that resulted in the immediate and unplanned shutdown of the entire refinery.

The investigation into the PG&E power outage is ongoing as of the date of this report. Any information not currently available will be provided in updates when the investigation concludes.

Valero hereby submits this written report within the required 30 days of the event occurrence.

BAAQMD Rule 1-208 defines a Breakdown as follows:

- **1-208 Breakdown (malfunction):** Any unforeseeable failure or malfunction of any air pollution control equipment or operating equipment which causes a violation of any emission standard or limitation prescribed by District, California or federal rules, regulations or laws, where such failure or malfunction:
 - 208.1 Is not the result of intent, neglect, or disregard of any air pollution control law, rule or regulation;
 - 208.2 Is not the result of improper maintenance;
 - 208.3 Does not constitute a nuisance;
 - 208.4 Is not an excessively recurrent breakdown of the same equipment.

It is important to note that the Valero Benicia Refinery recently completed its 2017 Maintenance Turnaround Event and had succeeded in a safe and stable startup of the refinery. The refinery had no unforeseeable failures or malfunctions of any equipment that might cause a permit violation as described in BAAQMD Rule 1-208 Breakdown definition.

BAAQMD Rule 1-432 Breakdown report requirements and Valero's response to each criteria are as follows:

- **1-432 Written Breakdown Report:** Within 30 days of the occurrence of a breakdown, the person responsible shall submit a written report to the APCO including the following:
 - 432.1 Sufficient information to enable the APCO to determine whether or not a breakdown occurred and the cause of the breakdown;
 - Valero Response: Attached documentation provides all available information to support that a breakdown was the cause of the indicated Excesses and permit deviations.
 - 432.2 A summary of the corrective action taken following the breakdown;
 - Valero Response: Valero conducted an immediate and unplanned shutdown of the entire refinery. Unit equipment was inspected, and repaired where necessary.
 - 432.3 Present status of the breakdown, and
 - Valero Response: Breakdowns listed in the attachments provide end times for the breakdown period.
 - Valero Response: Unit status is routinely reported and updated to the BAAQMD as required for those unit shutdowns and startups that occurred. As the refinery returns to operations, the unit status can change on a daily basis.
 - 432.4 A summary of actions taken to insure that such breakdowns will not occur in the future.
 - Valero Response: At this time, the Investigation of the PG&E Event is ongoing and there is no additional summary of actions taken to insure that such breakdowns will occur in the future.

- The refinery also has a cogeneration unit. However the cogeneration is not the refinery backup power supply; it is an alternate refinery power supply that can provide up to 47 MW of power. This event forced Valero's cogeneration plant offline which is designed to occur in the event of a 230 kW loss of PG&E power.
- There are dual 230 kW feeders provided by PG&E to mitigate the threat of a power outage on a single refinery feeder line.

The attachments include

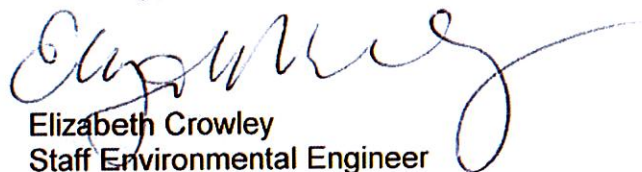
- A summary table to clarify the BAAQMD Episode ID accounting
- Supporting information for the BAAQMD ID#'s listed in the document.

The initial data provides the following estimated general timeline of the Breakdown events:

Estimated Time	Event	Consequence
06:40	PG&E Power Outage	Loss of power to pumps for process units, utilities (steam generation, water pumps). Units relieve to flare, and 2 PRVs lift. Refinery emergency shutdown begins.
07:00	PG&E Power Provides power back	Electrical systems in Refinery must first be checked for safety before return to service.
07:50	Electrical Supply to Refinery Restored	Units have power to begin stabilizing and clearing for shutdown.
15:00	Power Distribution System Normalized	Units have power to begin stabilizing and clearing for shutdown.

The data provided demonstrates compliant and stable operations prior to the PG&E power outage and then subsequent emissions excesses caused by the upset following the power outage. This PG&E Event was clearly not a case of Valero error, deferred maintenance, negligence, or any other foreseeable air pollution control or operating equipment failure or malfunction. Valero looks forward to your response to this procedural request.

Sincerely,



Elizabeth Crowley
Staff Environmental Engineer

EMC/tac

Mr. Jack Broadbent, BAAQMD
June 2, 2017
Page 4

Attachments:

BAAQMD Acknowledgement of Receipt of Breakdown report
BAAQMD Episode Number Summary Table
07D18 Supporting Data
07D19 Supporting Data
07D20 Supporting Data
07D21 Supporting Data
07D22 Supporting Data
07D23 Supporting Data
07D24 Supporting Data
07D25 Supporting Data
07D26 Supporting Data
07D27 Supporting Data
07D28 Supporting Data
07D29 Supporting Data
07D30 Supporting Data
07D31 Supporting Data
07D32 Supporting Data
07D38 Supporting Data
07D46 Supporting Data
07D47 Supporting Data
07D48 Supporting Data
07D49 Supporting Data

cc:

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